

EXHIBIT A
Clean Copy of Claims

1/ A therapeutic bed comprising:

a base frame,

a patient support platform rotatably mounted on the base frame for rotational movement about a longitudinal rotational axis of the patient support platform,

a motor operable to rotate the patient support platform on the base frame, and

B³ a guide body defining one or more patient care line receiving slots operable to guide one or more patient care lines from an apparatus external of the patient support platform to a patient on the patient support platform.

2/ A therapeutic bed as claimed in claim 1, wherein the guide body is mounted on the patient support platform.

B⁴ 3/ A therapeutic bed as claimed in claim 1, further comprising a bore for through passage of the patient care lines and wherein the guide body comprises a bore insert that is provided for engagement within the bore, the bore insert defining a number of spaced-apart slots about a periphery of the insert, each slot for receipt of a patient care line, each slot being closed by a side wall of the bore when the insert is mounted within the bore.

B⁵ 4/ A therapeutic bed as claimed in claim 1 wherein the slots are spaced apart along the periphery of the guide body.

B⁵ 5 ~~1~~ A therapeutic bed as claimed in claim 1 wherein each slot has a side opening, and a spring-loaded finger normally biased into a slot closing position across the side opening and retractable against the spring bias, the finger facilitating secured retention of a line and also facilitating insertion and removal of a line into or from the slot.

B⁶ 6 ~~1~~ A therapeutic bed as claimed in claim 1 wherein each slot has a side opening and a quick-release strip engagable across the side opening.

7 ~~1~~ A therapeutic bed as claimed in claim 1 wherein the guide body is movably mounted on the patient support platform.

8 ~~1~~ A therapeutic bed as claimed in claim 7 ~~1~~ wherein the guide body is slidably mounted on the patient support platform.

B⁷ 9 ~~1~~ A therapeutic bed as claimed in claim 1 wherein there is provided a plurality of prone support elements mounted between a head end and a foot end of the patient support platform for releasably securing a patient on the patient support platform, said prone support elements being operatively connected to the motor to regulate rotation of the patient support platform in response to correct engagement of the plurality of prone support elements.

10 ~~1~~ A therapeutic bed as claimed in claim 9 ~~1~~ wherein the plurality of prone support elements comprise matching pairs of support elements mounted on opposite sides of the patient

support platform and fasteners to secure the matching support elements together to retain a patient on the patient support platform,

sensors associated with each fastener that sense correct engagement of the fastener,

said sensors being connected to a controller for controlling operation of the motor.

B⁷ 11 ~~14~~ A therapeutic bed as claimed in claim ~~9~~/⁹3 wherein each fastener has a complementary pair of fastener parts, namely a first fastener part and a second fastener part, one fastener part being mounted on each of the pairs of support elements,

the first fastener part being normally biased out of engagement with the second fastener part,

the first fastener part cooperating with the sensor when in an engaged position to indicate that the fastener parts are engaged.

[12 ~~15~~ A therapeutic bed as claimed in claim ~~11~~/¹¹4 wherein the sensor has a magnetically operated switch and an operating magnet is mounted on the first fastener part to operate the switch.

13 ~~16~~ A therapeutic bed as claimed in claim ~~13~~/¹⁰ wherein the support elements are mounted on side rails upstanding at each side of the patient support platform.

B⁸ 14 ~~17~~ A therapeutic bed as claimed in claim ~~13~~/¹³ wherein each side rail is removably mounted on the patient support platform having means for releasably engaging the patient support platform,

locking means to secure the rail on the patient support platform,

rail sensing means to sense interlocking engagement of the rail with the patient support platform,

B8 said rail sensing means being operatively connected to the controller for the motor such that the motor will only operate if the rail is correctly engaged with the patient support platform.

15/18. A therapeutic bed as claimed in claim 13/16 wherein means is provided to lock each rail on the patient support platform when the patient support platform is in an inverted position.

16/19 A therapeutic bed as claimed in claim 1 wherein one or more hinged panels are provided in the patient support platform to provide access to a patient when the patient support platform is in an inverted position,

each panel having panel locking means to secure the panel in a closed position on the patient support platform,

B9 panel sensing means being provided to sense locking engagement of the panel with the patient support platform,

said panel sensing means being operatively connected to the controller for the motor such that the motor will only operate if the panel is locked in a closed position on the patient support platform.

17/20 A therapeutic bed as claimed in claim 1 wherein there is provided means for sensing the orientation of the patient support platform on the base frame, and means for

controlling operation of the motor in response to the sensed position of the patient support platform on the base frame.

18/2. A therapeutic bed as claimed in claim 17/20 wherein the ring has a number of parking slots located about the ring defining a number of parking locations for the patient support platform on the base frame at which a locking bolt is engagable between the patient support platform and the base frame to lock the patient support platform on the base frame.

19/23. A therapeutic bed comprising:

a frame;

a patient support platform mounted on the frame and rotatable about a longitudinal axis of rotation through substantially 180° from a patient face-up or supine position to a patient face-down or prone position;

the patient support platform comprising a hinged section that provides access to the back side of a patient when the patient support platform is in the patient face-down or prone position;

a plurality of prone patient supports mounted to opposite sides of the patient support platform; and

a motor operationally engaged with the patient support platform to provide controlled rotational movement to the patient support platform.

20/24. The therapeutic bed of claim 19/23, wherein at least some of the prone patient supports are hingedly mounted to the patient support platform.

21/25. The therapeutic bed of claim 19/23, wherein at least some of the prone patient supports are split adjacent the longitudinal axis of rotation of the patient support platform.

22/26. The therapeutic bed of claim 21/25, wherein at least some of the prone patient supports are operable to be locked to each other.

23/27. The therapeutic bed of claim 22/26, wherein at least some of the prone patient supports are hingedly mounted to the patient support platform.

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28. The therapeutic bed of claim ^{21/}~~25~~, wherein at least some of the prone patient supports are operable to be locked to each other with fasteners.

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29. The therapeutic bed of claim ^{21/}~~25~~, wherein at least some of the prone patient supports are operable to be locked to each other with straps and fasteners.

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30. The therapeutic bed of claim ^{19/}~~28~~, the patient support platform having side rails extending upwardly from the opposite lateral sides of the patient support platform, at least some of the prone patient supports being mounted to the side rails of the patient support platform.

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31. The therapeutic bed of claim ^{26/}~~30~~, wherein at least some of the prone patient supports are hingedly mounted to the side rails of the patient support platform.

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32. The therapeutic bed of claim ^{27/}~~31~~, wherein at least some of the prone patient supports are split adjacent the longitudinal axis of rotation of the patient support platform.

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33. The therapeutic bed of claim ^{28/}~~32~~, wherein at least some of the prone patient supports are operable to be locked to each other.

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34. The therapeutic bed of claim ^{28/}~~32~~, wherein at least some of the prone patient supports are operable to be locked to each other with fasteners.

³¹/₃₅ The therapeutic bed of claim ²⁸/₃₂, wherein at least some of the prone patient supports are operable to be locked to each other with straps and fasteners.

³⁴/₃₆ The therapeutic bed of claim ¹⁹/₂₃, wherein one of the prone patient supports is an abdomen support adjustable to accommodate abdomens of varying sizes.

³³/₃₇ The therapeutic bed of claim ³²/₃₆, wherein the abdomen support is comprised of a flexible material.

³⁴/₃₈ The therapeutic bed of claim ¹⁹/₂₃, wherein at least one of the prone patient supports comprises a strap to support the patient's head.

³⁵/₃₉ The therapeutic bed of claim ¹⁹/₂₃, wherein the prone patient supports comprise a head support section separately adjustable from a shoulder and upper body support section separately adjustable from an abdomen support section separately adjustable from a lower body support section.

³⁶/₄₀ A therapeutic bed comprising:

a frame;

a patient support platform rotatably mounted on the frame about a longitudinal axis of rotation, the patient support platform being rotatable from a patient face-up or supine position to a patient face-down or prone position;

a motor operationally engaged with and operable to alternately rotate the patient support platform about the longitudinal axis of the bed through an arc of alternating rotation substantially centered at the prone position; and

prone patient supports operable to retain a patient on the patient support platform and to provide support to the patient while the patient support platform is rotated from the supine to prone position and while the patient support platform is alternately rotated through said arc of alternating rotation;

wherein the therapeutic bed is operable to provide lateral rotation therapy to the patient while the patient is in the prone position.

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41. The therapeutic bed of claim 36, wherein the motor is operationally engaged with and operable to rotate the patient support platform through an arc of alternating rotation spanning from between positive 15 to 62 degrees from the prone position to a negative 15 to 62 degrees from the prone position.

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42. The therapeutic bed of claim 36, further comprising a pair of side rails extending upwardly from the patient support platform.

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43. The therapeutic bed of claim 38, wherein the side rails are operable to be displaced from their upwardly extending position on the patient support platform to facilitate mounting of patients on the patient support platform.

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44. A therapeutic bed comprising:

a frame;

a patient support platform mounted on the frame and rotatable about a longitudinal axis of rotation through substantially 180° from a patient face-up or supine position to a patient face-down or prone position;

a pair of side rails extending upwardly from the patient support platform; and

a motor operationally engaged with the patient support platform to provide controlled rotational movement to the patient support platform.

41/
45. The therapeutic bed of claim 40/
44, wherein the side rails are operable to be displaced from their upwardly extending position on the patient support platform to facilitate mounting of patients on the patient support platform.

42/
46. The therapeutic bed of claim 41/
45, wherein the side rails are operable to be locked into their upwardly extending position on the patient support platform.

43/
47. The therapeutic bed of claim 40/
44, further comprising prone patient supports mounted to the side rails.

44/
48. The therapeutic bed of claim 43/
47, wherein the side rails are operable to be displaced from their upwardly extending position on the patient support platform to facilitate mounting of patients on the patient support platform.

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49. The therapeutic bed of claim 44, wherein the side rails are operable to be locked into their upwardly extending position on the patient support platform.

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50. A therapeutic bed operable to provide lateral rotational therapy to a patient in both the supine and prone positions, the bed comprising:

a frame;

a patient support assembly mounted on the frame;

wherein the patient support assembly comprises a patient support platform mounted on a circular structure having a center and a perimeter, the patient support assembly being rotatable about a longitudinal axis of rotation through substantially 180° from a patient face-up or supine position to a patient face-down or prone position;

wherein the longitudinal axis of rotation of the patient support assembly intersects the center of the circular structure;

wherein load from the patient support assembly is transferred to the frame through the perimeter of the circular structure; and

a motor operationally engaged with the patient support assembly to provide controlled rotational movement to the patient support assembly.

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51. The therapeutic bed of claim 46, wherein the circular support comprises at least one ring-shaped rail.

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52. The therapeutic bed of claim 46, wherein the perimeter of the circular support is barrel-shaped.

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53. The therapeutic bed of claim ~~46~~ 50, wherein the circular support is cylindrically shaped.

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54. The therapeutic bed of claim ~~46~~ 50, wherein the circular support is mounted on guide rollers on the frame.

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55. The therapeutic bed of claim ~~46~~ 50, further comprising prone patient supports mounted to opposite sides of the patient support assembly.

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56. The therapeutic bed of claim ~~51~~ 55, wherein the patient support assembly further comprises side rails extending upwardly from the opposite lateral sides of the patient support assembly.

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57. The therapeutic bed of claim ~~52~~ 56, wherein at least some of the prone patient supports are mounted to the side rails.

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58. The therapeutic bed of claim ~~53~~ 57, wherein at least some of the prone patient supports are hingedly mounted to the side rails.

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59. A method for treating a patient with respiratory problems comprising:
securing a patient to a mechanically powered patient support platform;

rotating the patient from a substantially supine position to a substantially prone position;
and

alternately laterally rotating the patient about a longitudinal axis of the bed across an arc spanning from between positive 15 to 62 degrees from the prone position to a negative 15 to 62 degrees from the prone position.

36/60. A method for treating patients with adult respiratory distress syndrome comprising:

securing a patient to a mechanically powered patient support platform;
rotating the patient from a substantially supine position to a substantially prone position;
and

alternately laterally rotating the patient about a longitudinal axis of the bed across an arc spanning from between positive 15 to 62 degrees from the prone position to a negative 15 to 62 degrees from the prone position.
